AN ANALYSIS OF THE SUPRASEGMENTAL ASPECTS OF TAGALOG AND SOME PREDICTIONS OF POSSIBLE LEARNER PROBLEMS WHEN SPEAKING JAPANESE

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Abstract

This paper investigates the suprasegmental aspects of Tagalog that contribute to sound contrasts between words, in particular its stress, rhythm, and intonation. This is then contrasted with its equivalent in the Japanese sound system. Based on the differences between the two languages, predictions are made on the kinds of pronunciation problems Tagalog speakers may have when speaking Japanese. While Japanese allows a lot of vowel reduction in natural speech, Tagalog preserves the full articulation of its vowels, so it is necessary that proper vowel reduction is observed. It is hoped that this study will serve as an introduction to the practical classroom challenges JFL (Japanese as a Foreign Language) teachers may face when teaching a particular linguistic group.

Key words

Tagalog, Japanese, stress, rhythm, intonation

I Introduction

The first in the series of this 2-part research report (Cuadra, 2000) dealt with the identifiable sound segments, or phonemes, that constitute the Tagalog language, and the combinations these phonemes are allowed to have at the level of the syllable.

We will go a step further as we look at features that extend over units of sound (i.e. the suprasegmental) that contribute to sound contrasts between words, for example. Specifically, the significant features of Tagalog stress, rhythm, and intonation will be described here and contrasted with the Japanese sound system. Based on this analysis, I will try to predict what kinds of pronunciation problems Filipinos may have when speaking the standard variety of Japanese.

II Discussion

The Suprasegmental Aspects

Stress

Stress is a recognizable unit perceived by a listener; in other words, syllables are heard as stressed when "they are more prominent than unstressed syllables" (Roach, 1991: 86).

The glottal stop

This prominence may result in phonemic differences between words due to stress placement

(ibid.: 44; see also Fromkin and Rodman, 1988: 114). For instance, in Tagalog, there is a difference in meaning between *puno* /`pu•noʔ/ (‘tree’) and *puno* /pu•`noʔ/ (‘full’). Even if both words have a glottal stop (indicated byʔ), as a result of an abrupt closure of the vocal cords (Roach, 1991: 28), *puno* is heard as “tree”, if the first syllable is stressed, or “full”, if the second syllable is stressed. Thus, the loudness and pitch of the stressed syllable serve to differentiate between these two words.

Aside from these two factors that contribute to the notion of stress, there is another element that must be considered, and that is when there is a perceptible change in the sound quality of a vowel in relation to the other vowels around it (ibid.: 86). An example of this is *bata* /`ba•ta/ (‘robe’) and *bata* /`ba•taʔ/ (‘child’) (Prator and Robinett, 1986: xxi, 37). Although both words are stressed on the first syllable, the more noticeable difference is the glottal stop at the end of the second word.

It could be argued too that there is an element of vowel length involved in this example as well (Roach, 1991: 86); /ta/ in the first word sounds longer, while /taʔ/ in the second sounds much shorter because of this glottal stop. As a result, the former is heard as stressed.

Tagalog words with vowel endings can either be stressed – with or without glottal stops – on the final syllable , e.g. *kape* /ka•`pe/ (‘coffee’), *ginto* /gin•`toʔ/ (‘gold’), or on the penultimate syllable, e.g. *babae* /ba•`ba•e/ (‘woman’), and *saranggola* /`sa•raŋ•`go•la/ (‘kite’) (Aspillera, 1990). In general, this ‘fixed’ stress placement rule can be applied to most Tagalog words (Ramos, 1985; Crystal, 1994).

Possible problem areas

“Most languages are very careful to preserve the sound of each vowel in its full form” (Gilbert, 1984: 17), and Tagalog is one of them. However, Japanese makes a distinction between strong (i.e. where the vowel retains its full quality) and whispered vowels (Neustupny, 1993; Tanaka and Kubozono, 2000).

While Japanese consonants and vowels in isolation sound similar to Tagalog’s and thus may look deceptively simple to pronounce, once they are combined, certain changes happen:

> The most radical of these changes is the full or partial dropping (“reduction” or “devoicing”) of vowels in certain positions. The vowels *i* and *u* are most strongly affected. For instance, the famous dish sukiyaki is pronounced *s’kiyaki* in Japanese, except in a very slow “spelling pronunciation.” (Neustupny, 1993: 165)

Another example to illustrate this point is Matsushita, pronounced *mats’sh’ta*. While Japanese is known to have a CV structure, in reality it has a $C_{0\text{-}2}V(:)C_{0\text{-}2}$ structure, similar to Tagalog, due to the influence of its suprasegmental aspects (Cuadra, 2000), particularly the devoicing of vowels. This means that it can have two consonant phonemes at its edges, i.e. /`sušt•ta/, where /š/and /t/ are practically combined.

Because stress may affect whether a vowel should be articulated fully or not (Prator and Robinett, 1986: 19), Tagalog speakers may fall into the trap of stressing the wrong syllables. Since Tagalog has ‘fixed’ stress, Matsushita may be pronounced as /mat•su•`ši•ta/, or kuchibiru (‘lips’) /*k’ch’biru*/ as /ku•tši•`bi•ru/. In both examples, all the vowel sounds are pronounced more fully and evenly, as opposed to the strong vowel sounds in Japanese only receiving almost full articulation. This is a result of applying Tagalog phonological rules to Japanese.

Knowing when to reduce vowels is an important feature of natural Japanese (Vance, 1987; Neustupny, 1993). As we shall see in the next section, the element of Tagalog rhythm also has a major influence on the non-reduction of these vowel sounds.

Rhythm

Rhythm refers to the regular occurrence of stressed and unstressed syllables during speech (Crystal, 1998). The rhythm of Tagalog is mechanically regular and, according to Hernandez and Edades, like the "staccato" bursts of gunfire - "evenly emphasized" sounds of equal force and duration (1966: 241). It has therefore been classified as a syllable-timed language (Prator and Robinett, 1986: 28; see also Gilbert, 1984: 21), which means that its syllables, stressed or unstressed, occur regularly over time in an utterance (Roach, 1991: 121).

Japanese, on the other hand, is classified as a mora-timed language (Nagai). A mora is a sound unit much shorter than a syllable (Crystal, 1994). To illustrate this point, let us look at the English pronunciation of *McDonald's*, as opposed to its Japanese counterpart (Table 1):

Language	Pronunciation	Number of sound units
English	/mək•`dɔ•nəldz/	3 syllables
Japanese	/mɑ•ku•do•nɑ•ru•do/	6 morae

English and Japanese pronunciation of *McDonald's*

Table 1

The three syllables in the English *McDonald's* have been converted into six morae in the Japanese. Since /nəldz/ is a syllable with a consonant cluster of /l/, /d/, and /z/ at its edge, and Japanese phonotactic rules (Cuadra, 2000) do not accommodate such a cluster, it is broken down into three morae, namely /nɑ/, /ru/, and /do/, with /z/ not assimilated at all. Thus, we see that this particular syllable can be reduced further to smaller sound units of morae.

As a mora-timed language, successive morae in Japanese are said to be almost isochronic, thus making it similar to syllable-timed languages (Grabe and Low, 2002), such as Tagalog and Spanish. The only salient difference is that while Japanese allows vowel reduction, Tagalog does not.

For example, *gagawin* /gɑ•gɑ•`win/ ('going to do'), when said in isolation, is stressed on the last syllable, however, in this case, when included in an utterance (Fig. 1), its stress shifts to /yon/, and the vowel in that syllable is correspondingly lengthened (Wong, 1987: 56).

Ano ang gagawin ko ngayon?

a`no aŋ ga ga win ko ŋa`yon

What am I going to do now?

Tagalog exhibiting features as a syllable-timed language

Figure 1

Perhaps this shift occurs to preserve the rhythmical cadence of the sentence – keeping the stress on /win/ would make the utterance very unnatural to a native speaker. In this example, all the vowels are

enunciated fully, with no devoicing whatsoever.

Possible problem areas

Tagalog rhythm is wrong for Japanese, and the most obvious adjustment a Filipino would have to make is to speak with proper stress and vowel reduction, which is an integral part of the rhythm of Japanese (Nagai; Tanaka and Kubozono, 2000). Nagai adds that "teachers of Japanese need to emphasize this...timing with confidence" and is something a learner should observe.

Rhythm and intonation play such a vital role in the structure and organization of speech that a failure to follow these principles could mean a breakdown in communication (Wong, 1987).

Intonation

Intonation is created by variations in the pitch patterns (i.e. from high to low) of a language (Finegan and Besnier, 1989; Roach, 1991; Crystal, 1994). Although these patterns vary according to each individual, there are some general patterns that can be described for Tagalog. One way to show intonation patterns is with pitch contours - lines that go up or down - corresponding to the rise and fall of the voice in an utterance (Gilbert, 1984; Prator and Robinett, 1986; Wong, 1987; Crystal, 1998).

For Tagalog, three general patterns are shown below:

Information question

a. *Ano ang gagawin ko ngayon?*

ɑ `no ɑŋ gɑ gɑ win ko ŋɑ `yon

What am I going to do now?

Yes-no question

b. *Tatawag ka ba ?*

tɑ tɑ wɑg kɑ `bɑ

Are you going to use the telephone?

Statement

c. *Mainit na yung pagkain.*

mɑ i nit nɑ yuŋ pɑg `kɑ in

The food is already hot.

In general, all utterances end with rising intonation. Information questions have rising intonation on the first stressed word, which is usually a question word. *Yes-no* questions do not differ in intonation from statements, but they are indicated by a question marker (*ba*), such as in the example above.

In ***a*** the voice rises on /no/ to signal a question, falls before *ang* (rising-falling intonation; see Prator and Robinett, 1986: 46), continues on a level tone until it rises again on /yon/ .

b, as in Japanese *yes-no* questions, has rising intonation at the end (Vance, 1987; Tanaka and

Kubozono, 2000), and the only difference between ***b*** and ***a*** lies in the intonation pattern at the beginning. Whereas the pitch will almost always rise on the stressed syllable of the question word in an utterance (i.e. /ɑ•`no/), for *yes-no* questions, it will tend to remain constant before it rises at the end.

c, on the other hand, follows the intonation pattern of ***b*** at the beginning, then falls on /kɑ/, which is the stressed syllable, before rising on /in/. This fall in pitch sets the fixed stress on the penultimate syllable in *pagkain* (‘food’) apart from the other syllables in the utterance.

The effect of stress on intonation

This fixed stress has an effect on intonation (Prator and Robinett, 1986: 28) towards the end of Tagalog utterances. Consider another example:

d. *Anong oras ka tumawag?*

ɑ `noŋ o rɑs kɑ tu ‘mɑ `wɑg

What time did you call?

It is interesting to note that *tawag* /`tɑ•wɑg/ (‘call’) is a word with penultimate stress, and once the *-um* infix is inserted into it to indicate past action, i.e. *tumawag* /tu•`mɑ•wɑg/ (‘called’) (Aspillera, 1990: 44), it still maintains its stress - this time on /mɑ/. However, in ***d***, the intonation pattern begins in the same way as ***a***, but falls on /mɑ/, before rising on /wɑg/. Similarly, while the stress on /mɑ/ is preserved by a fall in pitch to maintain the rhythm, the abrupt rise on /wɑg/ signals a shift that makes it more noticeable to a listener (Wong, 1987: 55).

Notice the “falling-rising-rising” intonation in:

e. *Gagamitin mo ba ang telepono?*

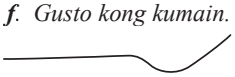
gɑ gɑ mi tin mo bɑ ɑŋ te ‘le po `no

Are you going to use the telephone?

Telepono /te•`le•po•no/ (‘telephone’) is stressed on the second syllable; the pitch follows the same beginning as ***b*** and ***c***, falls on /le/, before it rises in succession on /po/, then /no/ - a movement akin to words with penultimate stress (i.e. *pagkain* in ***c*** and *tumawag* in ***d***).

Another example - in this case with the *-um* infix within *kain* /`kɑ•in/ (‘eat’) - is:

f. *Gusto kong kumain.*



gus to koŋ ku ‘mɑ `in

I want to eat.

Again, the movement closely follows that of ***c, d,*** and ***e***.

Based on these observations, it may be said that the only difference between questions and statements - and one that will help a listener in distinguishing between the two - is the use of rising-

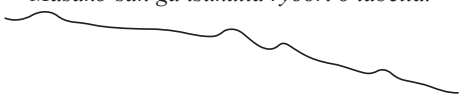
falling intonation on the stressed syllable of the question word, i.e. *ano* /ɑ•`no/ (‘what’) in ***a*** and ***d*** above.

Possible problem areas

The final rising intonation pattern as used in *yes-no* and *wh*-questions, which end with the Japanese question particle *ka*, is shared by both Tagalog and Japanese. However, while the latter uses final rising-falling intonation patterns in statements and commands (Tanaka and Kubozono, 2000; Ohata, 2004), in the former, the opposite occurs (cf ***c*** and ***f*** above).

Consider the following intonation pattern from Tanaka and Kubozono (2000):

Masako-san ga tsukutta ryoori o tabetta.



mɑ sɑ ko sɑn gɑʔ tsu ku tɑ ryo o ri oʔ tɑ be tɑʔ

I ate Masako-san’s cooking.

The pitch line slides from high to low in a series of rising-falling patterns, rising at /sɑ/, /ku/, /ryo/, and /tɑ/, and falling right after each of these morae.

The same utterance in Tagalog would go like this:

Kinain ko yung luto ni Masako-san.

ki `na in ko yuŋ lu to ni ma ‘sa ko `san

Herein lies a significant difference between the two pitch contours. Tagalog’s is almost flat: rising at /nɑ/, falling thereafter and proceeding at a level tone, before falling at /sɑ/, then rising at the end. As we can see, it uses a final falling-rising pattern at the end of statements such as this.

Rising-falling intonation, where the voice “rises above normal, then falls below normal” (Prator and Robinett, 1986), is one type of intonation pattern that is used a lot in Japanese. Since falling intonation at the end of an utterance signals a statement or an incomplete thought in Japanese (Vance, 1987; Tanaka and Kubozono, 2000), learners should be told to avoid statements using rising intonation, as is so typical of Tagalog, to avoid confusion.

The main difference between the two languages is the way pitch changes are utilized in creating rising or falling intonation contours. Tagalog uses less pitch variation than Japanese; that is, they have different pitch functions in utterances.

For example, to indicate a *wh*-question, question words in Tagalog receive a higher pitch on the stressed syllable than the rest of the words, until the level tone falls on the penultimate syllable of the last word before making its final rise at the end (cf ***d***). This same pattern of falling-rising intonation on words with penultimate stress occurs in statements and *yes-no* questions (cf ***c*** and ***f***). Except for utterances using question words, all others start on a level tone and end with rising intonation.

Japanese mainly utilizes pitch changes to indicate stress on the level of individual words; in

statements, words gently cascade from high to low, with slight, pitch variations (Tanaka and Kubozono, 2000; Ohata, 2004). Thus, Tagalog speakers may speak with a monotonous intonation pattern, devoid of the subtle variations in pitch used in Japanese.

III Conclusion

Overall, Tagalog speakers will have more problems communicating at the suprasegmental rather than at the segmental level. It is in the former where the more salient differences lie.

Because Japanese has a sound system similar to Tagalog's, its phonemic system is not so foreign. Japanese vowels, for example, are not difficult to pronounce in isolation. However, while the Japanese of Tagalog speakers may be intelligible at the segmental level, to a native speaker it may not be comprehensible, because of improper stress, rhythm and intonation.

The articulation of Japanese vowels, however, is affected more by proper stress placement. Since Tagalog vowel sounds retain full quality in speech, learners have to be aware that this condition does not apply in Japanese, which uses a lot of 'whispered' vowels.

Because stress affects the rhythm of Japanese, Filipinos will have to make a conscious adjustment that will approximate this feature. Once this has been mastered, proper use of intonation must follow so they may be understood more easily.

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